

Date: Friday, 5/26/2006 1:49:30 PM
 User: Linda Lacelle

Process Sheet

| | |
|--|---|
| Customer : CU-DAR001 Dart Helicopters Services | Drawing Name : HIGH AFT X-TUBE 412 |
| Job Number : 27260 | |
| Estimate Number : 10559 | |
| P.O. Number : N/A | Part Number : D412664203 |
| This Issue : 5/26/2006 S.O. No. : N/A | Drawing Number : D412-664-243 REV B |
| Prsht Rev. : NC | Project Number : N/A |
| First Issue : N/A Type : LANDING GEAR | Drawing Revision : B |
| Previous Run : 27182 | Material : JH |
| Written By : _____ | Due Date : 6/30/2006 Qty: 1 Um: Each |
| Checked & Approved By : _____ | |
| Comment : Est Rev:E 04.02.16 Reformat; Added D3189-1 K/DS Est Rev:F 06-03-29 Remove Coments on Pick List JLM | |

Additional Product

Job Number:



| | | |
|----------------|------------------------------|----------------------|
| Seq. #: | Machine Or Operation: | Description : |
|----------------|------------------------------|----------------------|

| | | |
|-----|----|------------------|
| 1.0 | DC | DOCUMENT CONTROL |
|-----|----|------------------|

**Comment:** DOCUMENT CONTROL

Photocopy bluefile and create labels as per PPP D412-664-203 CHG 003

06.06.05 kg (1)

| | | |
|-----|----------|--------------------|
| 2.0 | D6009129 | Crosstube Material |
|-----|----------|--------------------|

**Comment:** Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)

Pick:

Qty Part number Description Batch

1 D6009-129 Crosstube BTSAH2

Check OD = 3.500"; ID = 2.250"

BG 06.05.31

| | | |
|-----|------------|----------------------------|
| 3.0 | MORI SEIKI | MORI SEIKI CNC LATHE LARGE |
|-----|------------|----------------------------|

**Comment:** MORI SEIKI CNC LATHE LARGE

1-Fill tube with sand & install plugs DT8534 on both ends as per Folio FA166

2-Turn first side as per Folio FA166

3-Deburr & Inspect for surface damage. Repair damage within limits as per Dwg D412-664-243. MB 06/06/01 1

| | | |
|-----|-----|------------------------------|
| 4.0 | QC1 | INSPECT ALL DIM TO DIM SHEET |
|-----|-----|------------------------------|

**Comment:** INSPECT ALL DIM TO DIM SHEET

MB 06/06/01 1

| W/O: | | WORK ORDER CHANGES | | | | | |
|------|------|--------------------|----|------|-----|---------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE | By | Date | Qty | Approval Mfg / Design Mgr | Approval QC Inspector |
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| NCR: | | WORK ORDER NON-CONFORMANCE (NCR) | | | | | | |
|------|------|----------------------------------|-----------------------------|----------------------------------|----------------|---------------------------|------------------------|--------------------------|
| DATE | STEP | Description of NC Section A | Corrective Action Section B | | | Verification Section C | Approval Design Mgr | Approval QC Inspector |
| | | | Initial Design Mgr | Action Description Design Mgr | Sign & Date | | | |
| | | | | | | | | |
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Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

NOTE: Date & initial all entries

QA: N/C Closed: _____ Date: _____

Date: Friday, 5/26/2006 1:49:30 PM
User: Linda Lacelle

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: HIGH AFT X-TUBE 412

Job Number: 27260

Part Number: D412664203

Job Number:



| Seq. #: | Machine Or Operation: | Description : |
|---------|-----------------------|---------------|
|---------|-----------------------|---------------|

5.0

MORI SEIKI

MORI SEIKI CNC LATHE LARGE



Comment: MORI SEIKI CNC LATHE LARGE

1-Turn second side as per Folio FA166

2-Deburr & Inspect for surface damage. Repair damage within limits as per Dwg D412-664-243.

3-Polish entire outside surface of crosstube

4- Remove sand and plugs

5-Scribe part # and batch # using vibrating stylus as per Dwg D412-664-243

BL 06.06.03

1

6.0

QC1

INSPECT ALL DIM TO DIM SHEET



Comment: INSPECT ALL DIM TO DIM SHEET

BL 06.06.03

1

7.0

QC8

SECOND CHECK



Comment: SECOND CHECK

S.G 06106105

1

8.0

HAND FINISHING1

HAND FINISHING RESOURCE #1



Comment: HAND FINISHING RESOURCE #1

Chemical Conversion Coat as per QSI 005 4.1

RT 06-06-07

9.0

QC3/5

INSPECT WORK/WING WALK



Comment: Inspect work & Chemical conversion Coat

DP 06-6-8

10.0

BENDING

BENDING MACHINE



Comment: BENDING MACHINE

Bend tube as per Dwg D412-664-243 using CNC bender program 412-af and Folio FT010

DP 06-6-14

11.0

QC6

DIMENSIONAL CHECK



Comment: DIMENSIONAL CHECK

BL 06-06-19

| W/O: | | WORK ORDER CHANGES | | | | | |
|------|------|--------------------|----|------|-----|---------------------------------|--------------------------|
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Date: Friday, 5/26/2006 1:49:31 PM
User: Linda Lacelle

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: HIGH AFT X-TUBE 412

Job Number: 27260

Part Number: D412664203

Job Number:



Seq. #:

Machine Or Operation:

Description :

12.0

LANDING GEAR 1

LANDING GEAR RESOURCE 1



Comment: LANDING GEAR RESOURCE 1

1-Drill pilot holes in tube as per Dwg D412-664-243 using drill Jig DT8550 & DT8551

Pm' 06-06-2001

2-Ream hole to finish size in tube as per Dwg D412-664-243 using drill Jig DT8550 & DT8551. Check dimensions between holes, both sides on both cuffs, to ensure alignment with saddle holes.

Pm' 06-06-2001

3-Deburr & Inspect for surface damage. Repair damage within limits as per Dwg D412-664-243

Pm' 06-06-2101

13.0

HAND FINISHING1

HAND FINISHING RESOURCE #1



Comment: HAND FINISHING RESOURCE #1

Chemical Conversion Coat as per QSI 005 4.1

Pm' 06-06-2701

14.0

OUTSIDE SERVICE

OUTSIDE SERVICES



Comment: Sub-Contracting OUTSIDE SERVICES

Liquid Penetrant Inspection as per QSI 0380r

Issue P/O: 1627 LPI as per ASTM 1417

Level 2 Attach copy of NDT results to work order

C 207/07/06 ①

15.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Inspect for transit damage

Ensure copy of NDT results attached to work order.

AB 06/07/12

16.0

Q00

DIMENSIONAL CHECK ?



Comment: Inspect for damage & ensure results are as per Dwg D412-664-203

AB 06/07/12 ①

17.0

SPRAY PAINTING

SPRAY PAINTING



Comment: SPRAY PAINTING

1-Prime inside and outside crosstube as per QSI 005 4.2

MA 06 08 24 ①

2-Paint outside crosstube with White Imron as per QSI 005 4.2

MA 06 08 24 ①

| W/O: | | WORK ORDER CHANGES | | | | | |
|----------|------|----------------------|----|----------|-----|---------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE | By | Date | Qty | Approval Mfg / Design Mgr | Approval QC Inspector |
| 06-06-22 | 13.1 | QCS | | 06-06-22 | 1 | | |
| | | Permanent change | | | | | 06-06-22 |
| 06-06-22 | 16 | QCS permanent change | | | | | 06-06-22 |

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Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

NOTE: Date & initial all entries

QA: N/C Closed: _____ Date: _____

Date: Friday, 5/26/2006 1:49:31 PM
User: Linda Lacelle

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: HIGH AFT X-TUBE 412

Job Number: 27260

Part Number: D412664203

Job Number:



Seq. #: Machine Or Operation: Description :

18.0

QC14

Inspect Spray Paint



06-08-25



Comment: Inspect Spray Paint

Wrap in plastic bag to protect from scratches

19.0

D2856600

Abrasion Strip



Comment: Qty.: 1.7640 f(s)/Unit Total : 1.7640 f(s)

Pick:

Qty Part number Description Batch

2 D2856-600(Cut to 10.090") Abrasion Strip

B24328

RT

06-08-30

20.0

D2856600

Abrasion Strip



Comment: Qty.: 1.0080 f(s)/Unit Total : 1.0080 f(s)

Pick:

Qty Part number Description Batch

1 D2856-600(Cut to 10.870") Abrasion Strip

B24328

RT

06-08-30

21.0

D28961

Support



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)

Pick:

Qty Part number Description Batch

1 D2896-1

Support

B26683

RT

06-08-30

22.0

D31891

Chafing Shield



Comment: Qty.: 2.0000 Each(s)/Unit Total : 2.0000 Each(s)

Pick:

Qty Part number Description Batch

2 D3189-1

Chafing Shield

B26687

RT

06-08-30

23.0

MS2192028

Clamp(per MIL-DTL-8783C)



Comment: Qty.: 4.0000 Each(s)/Unit Total : 4.0000 Each(s)

Pick:

Qty Part number Description Batch

4 MS21920-28

Clamp

M100479

RT

06-08-30

| W/O: | | WORK ORDER CHANGES | | | | | |
|------|------|--------------------|----|------|-----|---------------------------------|--------------------------|
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Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

NOTE: Date & initial all entries

QA: N/C Closed: _____ Date: _____

Date: Friday, 5/26/2006 1:49:31 PM
User: Linda Lacelle

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: HIGH AFT X-TUBE 412

Job Number: 27260

Part Number: D412664203

Job Number:



| Seq. #: | Machine Or Operation: | Description : |
|---------|-----------------------|---------------|
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|------|-----------|--------------------------|
| 24.0 | MS2192030 | clamp(per MIL-DTL-8783C) |
|------|-----------|--------------------------|



Comment: Qty.: 2.0000 Each(s)/Unit Total : 2.0000 Each(s)

Pick:

Qty Part number Description Batch

2 MS21920-30

Clamp

M101568

BS

06-08-30

| | | |
|------|----------------|-------------------------|
| 25.0 | LANDING GEAR 1 | LANDING GEAR RESOURCE 1 |
|------|----------------|-------------------------|



Comment: LANDING GEAR RESOURCE 1

Assemble as per Dwg D412-664-203

BS 06-08-31

| | | |
|------|-----|------------------------------|
| 26.0 | QC5 | INSPECT WORK TO CURRENT STEP |
|------|-----|------------------------------|



Comment: INSPECT WORK TO CURRENT STEP

NP 6-8-31

| | | |
|------|-------------|-----------------------|
| 27.0 | PACKAGING 1 | PACKAGING RESOURCE #1 |
|------|-------------|-----------------------|



Comment: PACKAGING RESOURCE #1

Pick Packing Kit

| | | |
|------|--------|------|
| 28.0 | AN640A | Bolt |
|------|--------|------|



Comment: Qty.: 4.0000 Each(s)/Unit Total : 4.0000 Each(s)

Bolt

Batch:

M101124 ✓

| | | |
|------|--------|------|
| 29.0 | AN641A | Bolt |
|------|--------|------|



Comment: Qty.: 2.0000 Each(s)/Unit Total : 2.0000 Each(s)

Bolt

Batch:

M101418

| | | |
|------|------------|--------|
| 30.0 | AN960JD616 | Washer |
|------|------------|--------|



Comment: Qty.: 18.0000 Each(s)/Unit Total : 18.0000 Each(s)

Washer

Batch:

M100697 ✓

LB 06/09/01

| W/O: | | WORK ORDER CHANGES | | | | | |
|------|------|--------------------|----|------|-----|---------------------------------|--------------------------|
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Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes ☒ No ☐ DQA: ☒ Date: 8/19/06

NOTE: Date & initial all entries

QA: N/C Closed: _____ Date: _____

Date: Friday, 5/26/2006 1:49:31 PM
User: Linda Lacelle

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: HIGH AFT X-TUBE 412

Job Number: 27260

Part Number: D412664203

Job Number:



Seq. #:

Machine Or Operation:

Description :

31.0

MS21042L6

Nut



Comment: Qty.: 6.0000 Each(s)/Unit Total : 6.0000 Each(s)

Nut

Batch: M100151

LS 06/09/01

32.0

QC4

INSPECT 100% KITS FOR COMPLETENESS



Comment: INSPECT 100% KITS FOR COMPLETENESS

PU 6/9/01

33.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Identify and pack for shipping as per PPP D412-664-203

Location: _____

PPP Rev: D

PU 6/9/01 (1)

34.0

DC

DOCUMENT CONTROL



Comment: DOCUMENT CONTROL

Inspection Level 21

LS 06/09/06 (1)

Job Completion



LS 06/09/05

| W/O: | | WORK ORDER CHANGES | | | | | |
|------|------|--------------------|----|------|-----|---------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE | By | Date | Qty | Approval Mfg / Design Mgr | Approval QC Inspector |
| | | | | | | | |
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Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

NOTE: Date & initial all entries

QA: N/C Closed: _____ Date: _____

| | |
|---|----------------------------------|
| DART AEROSPACE LTD | Work Order: 27260 |
| Description: Crosstube Assembly (412 High Aft) | Part Number: D412-664-243 |
| Inspection Dwg: D412-664-243 Rev: B | Page 1 of 1 |

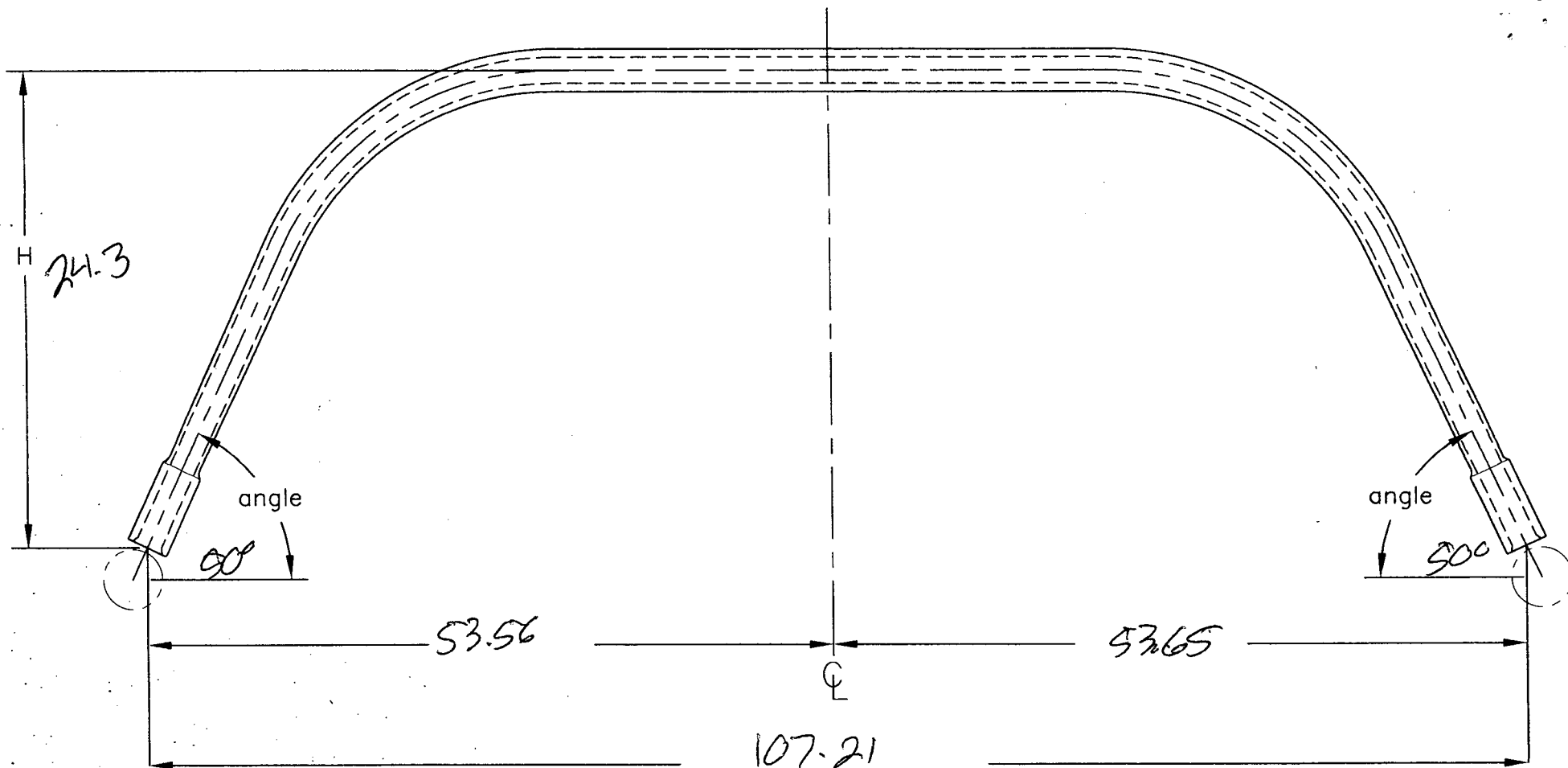
FIRST ARTICLE INSPECTION CHECKLIST

☒ First Article
 ☐ Prototype

| Inspection Sheet | Drawing Dimension | Tolerance | Actual Dimension | Accept | Reject | Method of Inspection | Comments |
|------------------|-------------------|---------------|------------------|--------|--------|----------------------|----------|
| SIDE A | 2.684 | +0.005/-0.000 | 2.687 | — | | | |
| | 2.748 | +0.005/-0.000 | 2.753 | ✓ | | | |
| | 2.884 | +0.005/-0.000 | 2.889 | — | | | |
| | 3.019 | +0.005/-0.000 | 3.022 | — | | | |
| | 3.163 | +0.005/-0.000 | 3.167 | ✓ | | | |
| | 3.308 | +0.005/-0.000 | 3.310 | — | | | |
| | 3.429 | +0.005/-0.000 | 3.430 | ✓ | | | |
| | 2.990 | +0.005/-0.000 | 2.992 | ✓ | | | |
| | 2.618 | +0.005/-0.000 | 2.622 | ✓ | | | |
| | | | | | | | |
| | 0.200 | +/-0.010 | .200 | ✓ | | | |
| | R0.063 | +/-0.010 | .063 | — | | | |
| | R0.500 | +/-0.010 | .500 | — | | | |
| | 4.971 | +/-0.001 | 4.970 | ✓ | | | |
| | | | | | | | |
| SIDE B | 2.684 | +0.005/-0.000 | 2.687 | ✓ | | | |
| | 2.748 | +0.005/-0.000 | 2.753 | — | | | |
| | 2.884 | +0.005/-0.000 | 2.889 | — | | | |
| | 3.019 | +0.005/-0.000 | 3.022 | ✓ | | | |
| | 3.163 | +0.005/-0.000 | 3.167 | ✓ | | | |
| | 3.308 | +0.005/-0.000 | 3.311 | — | | | |
| | 3.429 | +0.005/-0.000 | 3.431 | — | | | |
| | 2.990 | +0.005/-0.000 | 2.992 | ✓ | | | |
| | 2.618 | +0.005/-0.000 | 2.622 | ✓ | | | |
| | | | | | | | |
| | 0.200 | +/-0.010 | .200 | ✓ | | | |
| | R0.063 | +/-0.010 | .063 | — | | | |
| | R0.500 | +/-0.010 | .500 | — | | | |
| | 4.971 | +/-0.001 | 4.970 | ✓ | | | |
| | 124.09 | +/-0.020 | 124.09 | ✓ | | | |
| | | | | | | | |

| | | | |
|------------------------|------------------------|----------------------------|-----|
| Measured by: BG | Audited by: J.G | Prototype Approval: | N/A |
| Date: 06.06.03 | Date: 06/06/05 | Date: | N/A |

| Rev | Date | Change | Revised by | Approved |
|-----|----------|------------------------------|------------|----------|
| A | 04.06.16 | New Issue (P/O D412-664-203) | KJ/JLM | |
| B | 06.03.09 | Dwg Rev updated | KJ/JLM | |



DATE: 06.06.19

DESCRIPTION: D412-64-203

BATCH NO: 27260

DRAWING: D412-64-203 Rev B

H: 24.37

1/2 SPAN: 53.72

TOTAL SPAN: 107.44

ANGLE: 50°

[Handwritten signature]

**HeathAir**

INTERNATIONAL (1991) INC.

681 Ave. Lapine, Dorval, Québec H9P 1G3

Tél.: (514) 636-1000 • Fax: (514) 636-0031

W.O. N° 34464

A.M.O. Number: 46/90

NON-DESTRUCTIVE TESTING REPORT**AIRCRAFT / COMPONENT INFORMATION**

REGISTRATION:

MODEL/TYPE:

SERIAL NUMBER:

TOTAL HR/LDG:

OPERATED BY:

BASED AT:

INSPECTION REQUIREMENTS

Carry out FPI of (14) cross tube (external surface) as per ASTM E-1417-05 and the Dart QSI 038, Section 4.1.1 (on file at client) - parts delivered to HeathAir.

Qty (10) P/N D212-664-101 S/N's B26319, B27460, B27461, B27459, B27277, B27276, B27278, B27275, B27458 & B27462.

Qty (4) P/N D212-664-203 S/N B27179, B27260, B27182 & B27391.

☐ RADIOGRAPHY☐ ULTRASONIC☒ PENETRANT☐ MAGNETIC PARTICLE☐ EDDY CURRENT**INSPECTION REPORT**

Fluorescent penetrant inspection was performed in accordance with the above requirements on (14) Cross Tubes.

Note: A Level 3 penetrant was substituted for the requested Level 2 (3 is more sensitive) Ardrex 970P25E Batch #04B503.

All cross tubes PASSED inspection.

THE MAINTENANCE DESCRIBED ABOVE HAS BEEN PERFORMED IN ACCORDANCE WITH
THE APPLICABLE STANDARDS OF AIRWORTHINESS

DATE July 11, 2006

INSPECTED BY: INSPECTION
STAMP(S)

N/R

CUSTOMER INFORMATION

CUSTOMER: Dart Aerospace

P.O. NUMBER 1627 ✓

ADDRESS:

CONTACT NAME: Linda

LABOUR

⊙

\$

MATERIALS

⊙

TRAVEL EXPENSES

⊙

GST

HOTEL EXPENSES

⊙

PST

INVOICE NO.

TOTAL \$

WHITE COPY - INSPECTION FILE • YELLOW COPY - CUSTOMER • PINK COPY - ACCOUNTANT